

# METHODS AND APPARATUS FOR CONDITIONING AND TEMPERATURE CONTROL OF A PROCESSING SURFACE

## ABSTRACT OF THE DISCLOSURE

Methods and apparatus for controlling the temperature of a process surface and for conditioning of a process surface are provided. A temperature controller is described within a CMP system. The temperature controller includes an array of thermal elements. Each of the thermal elements of the array is independently controlled. The array of thermal elements is positioned to contact a back surface of the processing surface to manage and control processing surface temperature in defined processing zones. A process surface conditioner includes an array of conditioning pucks for conditioning an outer preparation surface. Each of the conditioning pucks of the array is independently controlled.